ARRANGEMENT BETWEEN

THE UNITED STATES NUCLEAR REGULATORY COMMISSION

AND

THE INDONESIAN NUCLEAR ENERGY REGULATORY AGENCY

FOR THE EXCHANGE OF TECHNICAL INFORMATION AND COOPERATION IN NUCLEAR SAFETY MATTERS

October 1, 2008

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The United States Nuclear Regulatory Commission (hereinafter called the USNRC) and the Indonesian Nuclear Energy Regulatory Agency (hereinafter called BAPETEN), hereinafter referred to singularly as "the Party", and collectively referred to as "the Parties";

Having a mutual interest in a continuing exchange of information pertaining to regulatory matters and of standards required or recommended by their organizations for the regulation of safety and environmental impact of nuclear facilities;

Taking into account the Arrangement between the United States Nuclear Regulatory Commission and the Indonesian National Atomic Energy Commission for the Exchange of Technical Information and Cooperation in Nuclear Safety Matters, which was originally signed by BAPETEN's predecessor agency BATAN on October 28, 1992;

Having already renewed such Arrangement with BAPETEN for a period of five years on September 23, 1998, and again on September 17, 2003, and having now indicated their mutual desire to continue the established cooperation for an additional five years;

Referring to the Agreement Between the Government of the United States of America and the Government of the Republic of Indonesia for Cooperation in Scientific Research and Technological Development, signed on January 15, 1992; and Pursuant to the prevailing laws and regulations in their respective countries:

Have agreed as follows:

I. SCOPE OF THE ARRANGEMENT

- A. To the extent that the USNRC and BAPETEN are permitted to do so under the laws, regulations, and policy directives of their respective countries, the Parties will continue the exchange of the following types of unclassified technical information relating to the regulation of safety, safeguards, physical protection, waste management, radiological safety, and environmental impact of designated nuclear energy facilities and to nuclear safety research programs:
 - 1. Topical reports concerning technical safety, safeguards, physical protection, waste management, radiological safety, and environmental effects written by or for one of the Parties as a basis for, or in support of, regulatory decisions and policies.
 - 2. Documents relating to significant licensing actions and safety and environmental decisions affecting nuclear facilities.
 - 3. Detailed documents describing the USNRC process for licensing and regulating certain U.S. facilities designated by BAPETEN as similar to certain facilities being built or planned in Indonesia and equivalent documents on such Indonesian facilities.
 - 4. Reports on operating experience, such as reports on nuclear incidents, accidents and shutdowns, and compilations of historical reliability data on components and systems.
 - 5. Regulatory procedures for the safety, safeguards, physical protection, waste management, radiological safety, and environmental impact evaluation of nuclear facilities.
 - 6. Early advice of important events, such as serious operating incidents, government-directed reactor shutdowns, and emerging technical issues, that are of immediate interest to the Parties
 - 7. Copies of regulatory standards required to be used, or proposed for use, by the regulatory organizations of the Parties.
 - 8. Information in the field of nuclear safety research/assessment which the Parties have the right to disclose, either in the possession of one of the parties or available to it, including light water reactor safety information from the technical areas described in Addenda "A" and "B", attached hereto and made a part hereof. Cooperation in these itemized research/assessment areas may require a separate agreement, if determined to be necessary by the research/assessment

organizations of one or both of the Parties. Each Party will transmit immediately to the other information concerning safety research/assessment results that requires early attention in the interest of public safety, along with an indication of significant implications.

- B. Within the limits of available resources and subject to the availability of appropriated funds, the USNRC will cooperate with BAPETEN in trying to provide certain training and experience for BAPETEN personnel. Unless otherwise agreed, costs of salary, allowances, and travel of BAPETEN participants will be paid by BAPETEN or by a third party such as the International Atomic Energy Agency (IAEA). The following are typical of the kinds of training and experience that may be provided:
 - 1. BAPETEN inspector accompaniment of USNRC inspectors on operating reactor and reactor construction inspections in the U.S. including extended briefings at USNRC regional inspection offices.
 - 2. Participation by BAPETEN employees in USNRC staff training courses at NRC Headquarters or at NRC's Technical Training Center in Chattanooga, Tennessee.
 - 3. Assignment of BAPETEN employees for 6-24 month periods within the USNRC staff to work on USNRC staff duties and gain on-the-job experience.
 - 4. Possible training assignments within the radiation control programs of interested USNRC Agreement States.
 - 5. Possible short-term visits (3-5 days) of BAPETEN personnel to the U.S. to learn by observation and participation in selected safety activities.
- C. To the extent that the information, documents, and training opportunities provided by the USNRC as described in A. and B., above, are not adequate to meet BAPETEN's needs for technical advice, the Parties will consult on the best means for fulfilling such needs. The USNRC will attempt, within the limits of its own requirements and priorities, appropriated resources, and statutory authority, to assist BAPETEN in meeting these needs. For example, within these limits, the USNRC will attempt to meet requests that come through the IAEA for U.S. safety experts to participate in short-term technical assistance missions to Indonesia. These might involve giving lectures and providing advice in such areas as strengthening infrastructure (e.g., rulemaking, licensing, inspection, enforcement, emergency preparedness, and physical protection of nuclear materials), developing human resources, and problem solving. Collaborative safety projects may also be considered on a case-by-case basis.

D. It is understood by both Parties that the nuclear safety cooperation described above is being undertaken primarily because Indonesia is considering a commitment to nuclear power generation. The details of this cooperation (extent, timing, participants, etc.) will be subject to reevaluation as Indonesia reaches decisions in this area and as NRC considers its ability to provide expertise.

II. ADMINISTRATION

- A. The exchange of information under this Arrangement will be accomplished through letters, reports, and other documents, and by visits and meetings arranged in advance. A meeting will be held at such times as mutually agreed to review the exchange of information, to recommend revisions to the provisions of the Arrangement, and to discuss topics within the scope of the exchange. The time, place, and agenda for such meetings will be agreed upon in advance. Visits which take place under the Arrangement, including their schedules, will have the prior approval of the administrators referred to in paragraph B.
- B. An administrator will be designated by each Party to coordinate its participation in the overall exchange. The administrators will be the recipients of all documents transmitted under the exchange, including copies of all letters unless otherwise agreed. Within the terms of the exchange, the administrators will be responsible for developing the scope of the exchange, including agreement on the designation of the nuclear energy facilities subject to the exchange, and on specific documents and standards to be exchanged. One or more technical coordinators may be appointed as direct contacts for specific disciplinary areas. These technical coordinators will assure that both administrators receive copies of all transmittals. These detailed arrangements are intended to assure, among other things, that a reasonably balanced exchange providing access to equivalent available information from both sides is achieved and maintained.
- C. The application or use of any information exchanged or transferred between the Parties under this Arrangement will be the responsibility of the receiving Party, and the transmitting Party does not warrant the suitability of such information for any particular use or application.
- D. Recognizing that some information of the type covered in this Arrangement is not available within the agencies which are Parties to this Arrangement, but is available from other agencies of the governments of the Parties, each Party will assist the other to the maximum extent possible by organizing visits and directing inquiries concerning such information to appropriate agencies of the government concerned. The foregoing shall not constitute a commitment of other agencies to furnish such information or to receive such visitors.

III. EXCHANGE AND USE OF INFORMATION

A. General

The Parties support the widest possible dissemination of information provided, created or exchanged under this Arrangement, subject to the requirements of each Party's national laws, regulations and policies and the need to protect proprietary and other sensitive or privileged information, and subject to the provisions of the Intellectual Property Addendum, hereby incorporated into this Arrangement.

B. Definitions

- 1. The term "information" means unclassified information relating to the regulation of safety, safeguards, physical protection, waste management, radiological safety, including information on results or methods of assessment, research, and any other knowledge provided, created or exchanged under this Arrangement.
- 2. The term "proprietary information" means information created or exchanged under this Arrangement which contains trade secrets or other privileged or sensitive commercial information (such that the person having the information may derive a commercial benefit from it or may have a commercial advantage over those who do not have it), and may only include information which:
 - (a) has been held in confidence by its owner;
 - (b) is of a type which is customarily held in confidence by its owner;
 - has not been transmitted by the owner to other entities (including the receiving Party) except on the basis that it be held in confidence,
 - (d) is not otherwise available to the receiving Party from another source without restriction on its further dissemination; and
 - (e) is not already in the possession of the receiving Party.
- 3. The term "other confidential or privileged information" means non-classified information, other than "proprietary information," which has been transmitted and received in confidence under this Arrangement and is protected from public disclosure under the laws, regulations, or policies of the country of the Party providing the information, or is otherwise restricted by the provider."

C. <u>Marking Procedures for Documentary Proprietary Information</u>

A party receiving documentary proprietary information pursuant to this Arrangement shall respect the privileged nature of such information, provided that such proprietary information is clearly marked with the following (or substantially similar) restrictive legend:

"This document contains proprietary information furnished in confidence under an Arrangement dated October 1, 2008 between the United States Nuclear Regulatory Commission and the Indonesian Nuclear Energy Regulatory Agency and will not be disseminated outside these organizations, their consultants, contractors, and licensees, or concerned departments and agencies of the Government of the United States and the Government of Indonesia, without the prior written approval of (name of transmitting Party). This notice will be marked on each page of any reproduction hereof, in whole or in part. These limitations will automatically terminate when the proprietary information is disclosed by the owner without restriction."

This restrictive legend shall be respected by the Parties to this Arrangement. Proprietary information bearing this restrictive legend shall not be made public or otherwise disseminated in any manner unspecified or contrary to the terms of this Arrangement without the prior written consent of the transmitting Party. Proprietary information bearing this restrictive legend shall not be used by the receiving Party or its contractors, consultants, and licensees for any commercial purposes without the prior written consent of the transmitting Party.

D. <u>Dissemination of Documentary Proprietary Information</u>

- 1. In general, proprietary information received under this Arrangement may be disseminated by the receiving Party to persons within or employed by the receiving Party, and to concerned Government departments and Government agencies in the country of the receiving Party without prior consent of the Party furnishing proprietary information, provided
- 2. such dissemination is made on a case-by-case basis to persons or departments and agencies having a legitimate need for the proprietary information; and
- 3. such proprietary information shall bear the restrictive legend appearing in Section III.C of this Arrangement.
- E. Proprietary information received under this Arrangement may be disseminated by the receiving Party without prior consent of the Party furnishing proprietary information to contractors and consultants of the receiving Party located within the geographical limits of that Party's nation, provided
 - that the proprietary information is used by such contractors and consultants only for work within the scope of their contracts with the receiving Party relating to the subject matter of the proprietary information, and shall not be used by such contractors and consultants for any other private commercial purposes; and

- that such dissemination is made on a case-by-case basis to contractors and consultants having a legitimate need for the proprietary information and who have executed a non-disclosure agreement; and
- 3. that such proprietary information shall bear the restrictive legend appearing in Section III.C of this Arrangement.
- F. With the prior written consent of the Party furnishing proprietary information under this Arrangement, the receiving Party may disseminate such proprietary information more widely than otherwise permitted under the terms set forth in this Arrangement. The Parties will endeavor to grant such approval to the extent permitted by their respective national laws, regulations and policies, provided
 - 1. that the entities receiving proprietary information under Section III.F of this Arrangement, including domestic organizations permitted or licensed by the receiving Party to construct or operate nuclear production or utilization facilities, or to use nuclear materials, have a legitimate need for the proprietary information and have executed a non-disclosure agreement; and
 - 2. that the entities receiving proprietary information under Section III.F of this Arrangement, including domestic organizations permitted or licensed by the receiving Party to construct or operate nuclear production or utilization facilities, shall not use such proprietary information for any private commercial purposes; and
 - 3. that those entities receiving proprietary information under Section III.F of this Arrangement that are domestic organizations permitted or licensed by the receiving Party, agree to use the proprietary information only for activities carried out under or within the terms of their specific permit or license.

G. <u>Marking Procedures for Other Confidential or Privileged information of a Documentary Nature</u>

A Party receiving under this Arrangement other confidential or privileged information will respect its confidential nature, provided such information is clearly marked so as to indicate its confidential or privileged nature and is accompanied by a statement indicating

- 1. that the information is protected from public disclosure by the Government of the transmitting Party; and
- that the information is transmitted under the condition that it be maintained in confidence.

H. Dissemination of Other Confidential of Privileged Information of Documentary Nature

Other confidential or privileged information may be disseminated in the same manner as that set forth in Section III.D., Dissemination of Documentary Proprietary Information.

Non-Documentary Proprietary or Other Confidential or Privileged Information

Non-documentary proprietary or other confidential or privileged information provided in seminars and other meetings organized under this Arrangement, or information arising from the attachments of staff, use of facilities, or joint projects, will be treated by the Parties according to the principles specified for documentary information in this Arrangement; provided, however, that the Party communicating such proprietary or other confidential or privileged information has placed the recipient on notice as to the character of the information communicated.

J. Consultation

If, for any reason, one of the Parties becomes aware that it will be, or may reasonably be expected to become, unable to meet the non-dissemination provisions of this Arrangement, it will immediately inform the other Party. The Parties will thereafter consult to define an appropriate course of action.

K. Amendment

This Arrangement may be revised or amended at any time by mutual written consent by the Parties. Such revisions or amendments shall enter into force on such date as may be determined by the Parties and shall form an integral part of this Arrangement.

L. Settlement of Disputes

Any dispute between the Parties concerning the interpretation and/ or implementation of this Arrangement will be settled amicably through consultations or negotiations between the Parties.

M. Other

Nothing contained in this Arrangement will preclude a Party from using or disseminating information received without restriction by a Party from sources outside of this Arrangement.

IV. FINAL PROVISIONS

- A. Nothing contained in this Arrangement will require either Party to take any action which would be inconsistent with the laws, regulations, and policy directives applicable to that Party. Should any conflict arise between the terms of this Arrangement and those laws, regulations, and policy directives, the Parties agree to consult with a view to resolving any such conflict. No nuclear information related to proliferation-sensitive technologies will be exchanged under this Arrangement.
- B. Unless otherwise agreed, all costs resulting from cooperation pursuant to this Arrangement will be the responsibility of the Party that incurs them. The Parties' obligations under this Arrangement are subject to the availability of appropriated funds and to laws and regulations applicable to the Parties.
- C. This Arrangement will enter into force on the date of its signing. It will be valid for a period of five (5) years. It may be extended for a further period of time by written agreement of the Parties.
- D. Either Party may terminate this Arrangement by giving written notification one hundred eighty (180) days prior to its intended date of termination.
- E. All information protected by provisions of this Arrangement as Proprietary or other confidential or privileged information will remain so protected for the duration of this Arrangement, and after this Arrangement is expired or terminated, unless otherwise agreed by the Parties in writing.

IN WITNESS WHEREOF, the undersigned have signed this Arrangement.

DONE in duplicate at Vienna on the 1st day of October 2008, in the English language.

FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION:

Dale E. Klein, Chairman

FOR THE INDONESIAN NUCLEAR ENERGY REGULATORY AGENCY.

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A-1

ADDENDUM "A"

Areas in Which the USNRC Is Performing or Sponsoring Nuclear Safety Research

- 1. Reactor Vessel and Piping Integrity
- 2. Aging of Reactor Components
- 3. Reactor Equipment Qualification
- 4. Thermal Hydraulic Code Applications and Maintenance
- 5. Plant Performance
- 6. Human Performance
- 7. Core Melt and Reactor Coolant System Failure
- 8. Reactor Containment Safety
- 9. Containment Structural Integrity
- 10. Seismic Safety
- 11. Probabilistic Risk Assessment
- 12. Severe Accident Analysis
- 13. Radiation Protection and Health Effects
- 14. Radionuclide Transport and Waste Management
- 15. Nuclear Fuel Analysis
- 16. Dry Cask Storage and Transport
- 17. Decommissioning
- 18. Advanced Reactor Designs
- 19. Fire Protection

B-1

ADDENDUM "B"

Areas in Which BAPETEN Is Performing Nuclear Safety Research/Assessment

- 1. Human Reliability Analysis for G.A. Siwabessy (Material Test Reactor) Performance
- 2. TRIGA 2000 (Research Reactor) Seismic Safety Assessment
- 3. Probabilistic Safety Assessments
- 4. Radiation Protection and Health Effects
- 5. Safety Standards for Siting of the Indonesian Nuclear Power Plant
- 6. In-Core/ irradiation Safety Assessment
- 7. Nuclear Fuel (MTR Type) Safety Analysis
- 8. Reactor Component Aging and Failure-Rate Data

INTELLECTUAL PROPERTY ADDENDUM

Pursuant to Section III of this Arrangement:

The parties shall ensure adequate and effective protection of intellectual property created or furnished under this Arrangement and relevant implementing arrangements in accordance with their national laws and regulations. The parties agree to notify one another in a timely fashion of any inventions or copyrighted works arising under this Arrangement and to seek protection for such intellectual property in a timely fashion. Rights to such intellectual property shall be allocated as provided in this Addendum.

I. SCOPE

- This Addendum is applicable to all cooperative activities undertaken pursuant to this Arrangement, except as otherwise specifically agreed by the parties or their designees.
- 2. For purposes of this Arrangement, "intellectual property" shall have the meaning found in Article 2 of the Convention Establishing the World Intellectual Property Organization, done at Stockholm, July 14, 1967, and may include other subject matter as agreed by the parties.
- 3. This Addendum addresses the allocation of rights, interests, and royalties between the parties. Each party shall ensure that the other party can obtain rights to intellectual property allocated in accordance with the Addendum by obtaining those rights from its own participants through contracts or other legal means, if necessary. This Addendum does not otherwise alter or prejudice the allocation between a party and its nationals, which shall be determined by that party's laws and practices.
- 4. Disputes concerning intellectual property arising under this Arrangement should be resolved through discussions between the concerned participating institutions or, if necessary, the parties or their designees. Upon mutual agreement of the parties, a dispute shall be submitted to an arbitral tribunal for binding arbitration in accordance with the applicable rules of international law. Unless the parties or their designees agree otherwise in writing, the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL) shall govern.
- 5. Termination or expiration of this Arrangement shall not affect rights or obligations under this Addendum.

II. ALLOCATION OF RIGHTS

- 1. Each party shall be entitled to a non-exclusive, irrevocable, royalty-free license in all countries to translate, reproduce, and publicly distribute scientific and technical journal articles, reports, and books directly arising from cooperation under this Arrangement. All publicly distributed copies of copyrighted work prepared under this provision shall indicate the names of the authors of the work unless an author explicitly declines to be named.
- 2. Rights to all forms of intellectual property, other than those rights described in Section II.1., above, shall be allocated as follows:
 - a. Visiting researchers, for example, scientists visiting primarily in furtherance of their education, shall receive intellectual property rights under the policies of the host institution. In addition, each visiting researcher named as an inventor shall be entitled to share in a portion of any royalties earned by the host institution from the licensing of such intellectual property.
 - b. (1) For intellectual property created during joint research, for example, when the parties, participating institutions, or participating personnel have agreed in advance on the scope of work, each party shall be entitled to obtain all rights and interests in its own country. Rights and interests in third countries will be determined in implementing arrangements. If research is not designated as "joint research," rights to intellectual property arising from the research will be allocated in accordance with paragraph II.2.a., above. In addition, each person named as an inventor shall be entitled to share in a portion of any royalties earned by either institution from the licensing of the property.
 - (2) Notwithstanding paragraph II.2.b. (1), above, if a type of intellectual property is available under the laws of one party but not of the other party, the party whose laws provide for this type of protection shall be entitled to all rights and interests worldwide. Persons named as inventors of the property shall nonetheless be entitled to royalties as provided in paragraph II.2.b. (1), above.

III. <u>BUSINESS CONFIDENTIAL</u>

In the event that information identified in a timely fashion as business-confidential is furnished or created under this Arrangement, each Party and its participants shall protect such information in accordance with applicable laws, regulations, and administrative practices. Information may be identified as "business-confidential" if a person having the information may derive an economic benefit from it or may obtain a competitive advantage over those who do not have it, the information is not generally known or publicly available from other sources, and the owner has not previously made the information available without imposing in a timely manner an obligation to keep it confidential.